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Case Report

Foreign body sexual assault complicated by rectovaginal fistula

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ABSTRACT

A case is discussed of an adolescent presenting with a rectovaginal fistula secondary to a sexual assault 2 years earlier. The fistula resulted from a retained foreign body (bottle cap) inserted into the vagina during the assault. The adolescent did not disclose the presence of the foreign body at the initial examination.

1. Introduction

Rectovaginal fistulas are usually associated with obstetric complications,[1] inflammatory bowel disease, non-obstetric surgery, cancer and related treatment such as irradiation, and infection.[2] Development of rectovaginal fistulas due to retained foreign bodies has also been reported. In one report the fistula occurred after self-insertion of foreign bodies[3] but in another report the patient claimed she could not remember how the foreign body came to be inserted.[4] In both of these cases the women were suffering from mental impairment secondary to either dementia or stroke.

Development of a rectovaginal fistula after insertion of a foreign body during sexual assault is rare but one case has been reported in a retrospective review from the Democratic Republic of Congo.[5] Other traumatic rectovaginal fistulas have been described in association with adult penile and digital penetration of young prepubertal girls.[6,7] The case presented below concerns an adolescent girl sexually assaulted with a foreign body, which remained in her vagina for 2 years, resulting in the development of a rectovaginal fistula.

2. Case report

A seventeen year old young woman presented to a regional hospital Emergency Department stating that she wished to have a foreign body removed from her vagina. She alleged that the object was placed into her vagina during a sexual assault 2 years previously, when she was aged 15. At that time the patient had been referred to a sexual assault service by the police 7.5 h after the assault and a forensic assessment conducted for alleged external digital genital contact only. Examination findings included a series of five red linear abrasions ranging from 2–4 cm long over an area 4 cm × 3 cm on the back right shoulder and a normal external genital examination. The offender was charged and found guilty of the assault.

At the time of her presentation to the regional hospital Emergency Department the patient reported she had known that the offender had inserted something into her vagina during the assault, but had not disclosed this to either the police or the staff at the sexual assault clinic. The patient reported that more recently she had been experiencing a malodorous discharge from her vagina. The patient was emphatic that despite this symptom, she would not have presented to the Emergency Department without the encouragement of her current partner.

On examination the patient was afebrile and not systemically unwell. Her pulse was 72 beats/min and BP 108/66 mm Hg. A speculum examination was undertaken and a perforation in the right fornix noted with faecal material present in the vagina. On bimanual examination the foreign body appeared to have become embedded in the surrounding tissue and attempts to remove it were unsuccessful. The patient was admitted and treated with intravenous metronidazole and cefuroxime. An enhanced abdominal and pelvic CT scan performed the next day confirmed the presence of a rectovaginal fistula in the upper right vaginal vault. There was an associated cavity measuring roughly 50 mm in diameter containing gas, fluid and debris/faeces and increased gas was seen

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in the vagina distally. A possible small sliver-like dependent radiodense foreign body was imaged within this cavity. The patient underwent exploratory surgery at the regional hospital. This confirmed the presence of a large (>2.5 cm), high rectovaginal fistula between the middle third of the rectum and the posterior vaginal fornix, requiring a trans-abdominal approach for repair. Attempts to remove the foreign body were unsuccessful. The patient was transferred for tertiary care where the foreign body was removed under general anaesthesia and noted to be a plastic bottle lid 5 cm × 3 cm in size. A temporary colostomy was fashioned to allow a trial of conservative management of the fistula, in accordance with contemporary practice as removal of the foreign body and minimising contamination provide the best conditions for a rectovaginal fistula to heal spontaneously.

3. Discussion

Sexual assault is a significant problem in New Zealand society. Police figures show that in 2008, 3705 sexual offenses were reported to the police, 2405 of which were sexual assaults.[8] A retrospective review of 4 years of case records conducted by the New Zealand forensic science service (The Institute of Environmental Science and Research – ESR) found that of 1200 cases for which a forensic medical examination kit was submitted, there were 34 (2.8%) recorded episodes of foreign body insertion into the vagina and 11 (0.9%) instances of foreign body insertion into the rectum (Rian Morgan-Smith, ESR, personal communication). These figures show that sexual assault with foreign body penetration does occur in New Zealand and medical examiners must consider this possibility during assessment of acute cases.

In this case the patient did not disclose the presence of the foreign body at the time she reported the assault. Not only was the information withheld, but it was specifically denied during direct questioning by the examining doctor. At the time of the initial medical examination, the extent of the complaint related only to touching of the external genitalia. Questions were asked specifically relating to the possibility of attempted or completed penetration of the vagina but were denied. However, during the subsequent trial, the patient did confirm digital penetration of the vagina.

It is well recognized that victims of sexual abuse may delay disclosure and this is acknowledged in Section 27 of the New Zealand Evidence Act 2006, whereby judges are able to inform jurors that such delay may be for good reasons and has no bearing on the validity of the allegations.[9] Adolescents are significantly more likely than adults to delay reporting and provide incomplete reports of sexual assault.[10] Reasons include fear of reprisal, self-blame for the assault, loyalty to the perpetrator and/or family and lack of a supportive environment in which to disclose.[11,12] When asked why she had not revealed penetration by the foreign body at the time of the initial reporting the patient stated that she wished to protect her guardian, as the perpetrator was her guardian's ex-boyfriend. The patient felt compromised in her disclosure because her guardian was present throughout both the police interviews and the medical assessment.

Generally the presence of support people for adolescents during their encounters with authority is encouraged to facilitate a supportive and nonthreatening environment. Where the support person has a relationship of any sort with the perpetrator, there will be an inevitable conflict of interest and the adolescent must be given an opportunity to be alone with the clinician. In this case, the patient may have made a full disclosure if a portion of the medical consultation had been conducted without her guardian. A full explanation of words and phrases used routinely in history taking is also required as the understanding of phrases such as "penetration of the vagina" may vary enormously between adolescents. The adolescent also needs to be reassured that the information he or she reveals is confidential, is primarily for the sake of assessing health and well-being and will not automatically be provided to the police without his or her permission. Negotiation with the young person could then take place about how much of the information needs to be disclosed to the police and in what manner.

In this case neither a speculum nor bimanual vaginal examination was conducted at the time of the forensic assessment. Where there is no specific indication, medical staff may try to minimise the traumatic nature of the forensic medical assessment by omitting intrusive internal examinations. Most adolescents under the age of 17 will not have commenced regular cervical smears and may have never had a speculum inserted. To experience their first speculum examination in the context of a forensic assessment without good cause arguably places unnecessary stress on the adolescent at a time when she is most vulnerable. A speculum examination performed in the context of a forensic medical examination following an alleged sexual assault which did not involve vaginal penetration may precipitate discomfort and thoughts of "unnecessary intrusion" in any woman, let alone a non-sexually active adolescent. This approach to managing genital examinations in young women is consistent with international practice.[13]

Some forensic texts recommend the inclusion of a speculum examination after puberty, done sensitively and with full explanation and written consent.[14] The oestrogenised hymen of the adolescent who has been through menarche is more elastic and resilient than that of a pre-pubertal child, which may reduce the discomfort of the procedure, even in those who have never experienced penetrative sexual intercourse. With the benefit of hindsight in the case under discussion, a speculum examination would have been in the adolescent's best interest, as it would have enabled retrieval of the foreign body and therefore preservation of the posterior vaginal wall. In addition, if the bottle cap had been found during the initial forensic examination it could possibly have been used as evidence of criminal activity.

To routinely perform a speculum examination on every adolescent complaining of sexual assault seems unnecessarily intrusive, however without a full genital examination important information relevant to the health of the complainant and to any future judicial proceedings may be missed. Other indications for including a speculum examination in a forensic medical assessment include obvious injury such as bleeding or contusions on the external genital and in order to obtain samples looking for semen or infection.

An inorganic foreign body lodged in the posterior fornix of a sexually inactive female may be initially asymptomatic, especially if there is minimal associated infection. Lack of pain and/or systemic symptoms coupled with embarrassment and naivety concerning the possible consequences may result in denial or forgetfulness with respect to the presence of the foreign body. Eventually the formation of a fistula will led to symptomatic vaginal discharge. In this case even the presence of vaginal feculent discharge was not a strong enough motivator for the patient to seek medical advice on her own. This case underlines the importance of the initial forensic assessment following sexual assault, of routine expert follow-up and also of opportunistic assessment should an adolescent present to a clinician with other health concerns. In so doing, clinicians who are aware of the particular issue of piecemeal disclosure of information associated with adolescence can reduce the possibility of devastating sequelae from sexual assault.

Conflict of Interest

There are no conflicts of interest.

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Ethical Approval

None declared.

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